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PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:				
Sivaram Pillarisetti)	Art Unit: 1645	RECEIVED		
Serial No. 10/091,357	Ait Oint. 1043	MAY 1 6 2002		
Filed: March 1, 2002		TECH CENTER 1600/2900		
For: Methods and Compositions for the) Treatment and Prevention of Smooth Muscle) Cell Proliferation)				

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, DC 20231

Sir:

The citation of information on the attached Form PTO/SB/08 is made pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98. A copy of each cited item is enclosed.

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Janina A. Malone - Reg. No. 47,768

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Information Disclosure Statement Serial No. 10/091,357 Page 2

under applicable statutes, Rules of Practice in patent cases, or otherwise.

Respectfully submitted,

Janina A. Malone Reg. No. 47,768

KILPATRICK STOCKTON LLP 1100 Peachtree Street Suite 2800 Atlanta, Georgia 30309-4530 (404) 815-6500

Our Docket: 18631-0141(45115-368551)

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respond to a collection of information unless it contains a valid OMB Complete if Known Application Numb r 10/091,357 **Filing Date** March 1, 2002 First Named Inventor Sivaram Pillarisetti Group Art Unit **Examiner Name**

18631-0141 (45176-26855

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMME

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Application Number	10/091,357
Filing Date	March 1, 2002 MAY 1 6 4002
First Named Inventor	Sivaram Pillarisetti
Group Art Unit	STITED 1600
 Examiner Name	TECH CENTER 1600
Attorney Docket Number	18631-0141 (45115-268551)

	1	OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the	T
Examiner Initials	Cite No.1	item (book, magazine, journal, senal, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		Garg, Uttam C., et al., "Nitric Oxide-Generating Vasodilators and 8-Bromo-Cyclic	
		Guanosine Monophosphate Inhibit Mitogenesis and Proliferation of Cultured Rat	
		Vascular Smooth Muscle Cells", J. Clin. Invest., Vol. 83, No. 5, pp.1774-1777 (1989)	
		Hayashi, Kimiko, et al., "Endothelial Cells Interact with the Core Protein of Basement Membrane Perlecan Through Beta 1 and Beta 3 Integrins: An Adhesion Modulated by	
		Glycosaminoglycan", J. Cell Biol., Vol. 119, No. 4, pp. 945-959 (1992)	
		Iozzo, Renato V., et al., "Structural Characterization of Perlecan Gene Promoter", J. Biol. Chem., Vol. 272, No. 8, pp. 5219-5228 (1997)	
	+	Iozzo, Renato V., et al., "The Biology of Perlecan: the Multi-faceted Heparan Sulphate Proteoglycan of Basement Membranes and Pericellular Matrices", Biochem. J., Vol. 302, pp. 625-639 (1994)	
		Karnovsky, Morris J., "EndothelialVascular Smooth Muscle Cell Interactions", Am. J. Pathol., Vol. 105, No. 3, pp.200-206 (1981)	
		Karnovsky, M.J., et al., "Heparin, Heparan Sulfate, Smooth Muscle Cells, and Atherosclerosis", Ann. N.Y. Acad. Sci., Vol. 556, pp. 268-281 (1989)	
		Koyama, Noriyuki, et al., "Heparan Sulfate Proteoglycans Mediate a Potent Inhibitory Signal for Migration of Vascular Smooth Muscle Cells", Circ. Res., Vol. 83, No. 3, pp. 305-313 (1998)	
		Luscher, Thomas F., et al., "The Pathogenesis Of Cardiovascular Disease: Role of the Endothelium as a Target and Mediator", Atherosclerosis 118 Suppl., pp. S81-S90 (1995)	
		Nugent, Matthew A., et al., "Perlecan is Required to Inhibit Thrombosis After Deep Vascular Injury and Contributes to Endothelial Cell-Mediated Inhibition of Intimal Hyperplasia", PNAS, Vol. 97, No. 12, pp. 6722-6727 (2000)	
		Orford, James L., et al., "The Comparative Pathobiology of Atherosclerosis and Restenosis", Am. J. Cardiol., Vol. 86. pp. 6H-11H (2000)	
		Ottlinger, Michael E., et al., "Heparin Inhibits Mitogen-Activated Protein Kinase Activation in Intact Rat Vascular Smooth Muscle Cells", J. Biol. Chem., Vol. 268, No. 26, pp.19173-19176 (1993)	

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Application Number	10/091,357	BEOF.
Filing Date	March 1, 2002	c 201
First Named Inventor	Sivaram Pillari	setti MAY TO LO
Group Art Unit		7411
Examiner Name		OCNITER 1
Attorney Docket Number	18631-0141 (45	175(268564)

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²	
		Paka, Latha, et al., "Perlecan Mediates the Antiproliferative Effect of Apolipoprotein E		
	ļ	on Smooth Muscle Cells: An Underlying Mechanism for the Modulation of Smooth		
		Muscle Cell Growth?", J. Biol. Chem., Vol. 274, No. 51, pp. 36403-36408 (1999)		
		Paka, Latha, et al., "Apolipoprotein E Containing High Density Lipoprotein Stimulates		
	ļ	Endothelial Production Heparan Sulfate Rich in Biologically Active Heparin-Like	Ì	
		Domains", J. Biol. Chem., Vol. 274, No. 8, pp. 4816-4823 (1999)		
	14	Pillarisetti, Sivaram, et al., "Lysolecithin-induced Alteration of Subendothelial Heparan		
		Sulfate Proteoglycans Increases Monocyte Binding to Matrix", J. Biol. Chem., Vol. 270,		
		No. 50, pp. 29760-29765 (1995)		
	1	Pillarisetti, Sivaram, et al., "Subendothelial Retention of Lipoprotein (a): Evidence that		
	4	Reduced Heperan Sulfate Promotes Lipoprotein Binding By Subendothelial Matrix", J.		
	l	Clin. Invest., Vol. 100, No. 4, pp. 867-874 (1997)		
	1	Ramasamy, Santhini, et al., "Oxidized Lipid-Mediated Alterations In Proteoglycan		
	ļ	Metabolism In Cultured Pulmonary Endothelial Cells", Atherosclerosis 120, pp. 199-		
	<u> </u>	208 (1996)	L	
	1	Rosenberg, Robert D., et al., "Heparan Sulfate Proteoglycans of Vascular System:		
	1	Specific Structures Emerge But How is Synthesis Regulated?", J. Clin. Invest., Vol. 99,		
		No. 9, pp. 2062-2070 (1997)	L	
	1			
		Clin. Invest., Vol. 99, No. 12, pp. 2814-2817 (1997)		
	1 .	Weiser, Mary C., et al., "Developmental Regulation of Perlecan Gene Expression in		
	/	Aortic Smooth Muscle Cells", J. Matrix Biol., Vol. 15, No. 5, pp. 331-340 (1996)		
	,	Yu, Sheu-Meei, et al., "cGMP-elevating Agents Suppress Proliferation of Vascular		
		Smooth Muscle Cells by Inhibiting the Activation of Epidermal Growth Factor Signaling		
	1	Pathway", Circulation, Vol. 95, No. 5, pp. 1269-1277 (1997)		

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¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.